IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (Currently amended): A method for inter-node communication, comprising the steps of:

dividing a plurality of unencoded signals into groups at a first node, wherein each group ~~has a number~~ includes a portion of the unencoded signals;

transforming each group of unencoded signals into a group of encoded signals, wherein each group of encoded signals has nearly an equal number of logic 1's and logic 0's; and

transmitting the groups of encoded signals to a second node, whereby the groups of encoded signals are transmitted with minimal current fluctuations.

Claim 2 (Previously presented): The method of claim 1 wherein each group of unencoded signals includes an equal number of signals.

Claim 3 (Previously presented): The method of claim 6 wherein the step of transforming each group of unencoded signals into a group of encoded signals comprises the step of transforming a group of unencoded signals into a group of encoded signals having an equal number of logic 1's and logic 0's using one of the selected at least one encoding scheme.

Claim 4 (Previously presented): The method of claim 7 wherein the step of transforming each group of unencoded signals into a group of encoded signals comprises the step of transforming a group of six unencoded signals into a group of eight encoded signals.

Claim 5 (Previously presented): The method of claim 7 wherein the step of transforming each group of unencoded signals into a group of encoded signals comprises the step of transforming a group of four unencoded signals into a group of six encoded signals.

Claim 6 (Previously presented): The method of claim 1 further comprising the step of selecting at least one encoding scheme prior to performing the step of transforming each group of unencoded signals into a group of encoded signals.

Claim 7 (Currently amended): The method of claim 6 wherein the at least one encoding scheme transforms a group of unencoded signals to encoded signals such that a difference between a total number of unencoded data values and a total number of encoded data values is a ~~predetermined~~ fraction of the total number of unencoded data values.

Claim 8 (Previously presented): The method of claim 1 further comprising the step of transforming the groups of encoded signals received by the second node back into the plurality of unencoded signals.

Claim 9 (Currently amended): A method for inter-node communication, comprising the steps of:

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dividing a plurality of unencoded signals into groups at a first node, wherein each group ~~has a number~~ includes a portion of the unencoded signals;

transforming each group of unencoded signals into a group of encoded signals, wherein each group of encoded signals has nearly a constant number of logic 1's and logic 0's; and

transmitting the groups of encoded signals to a second node, whereby the groups of encoded signals are transmitted with minimal current fluctuations.

Claim 10 (Previously presented): The method of claim 9 wherein each group of unencoded signals includes an equal number of signals.

Claim 11 (Previously presented): The method of claim 12 wherein the step of transforming each group of unencoded signals into a group of encoded signals comprises the step of transforming a group of unencoded signals into a group of encoded signals having a constant number of logic 1's and logic 0's using one of the selected at least one encoding scheme.

Claim 12 (Previously presented): The method of claim 9 further comprising the step of selecting at least one encoding scheme prior to performing the step of transforming each group of unencoded signals into a group of encoded signals.

Claim 13 (Currently amended): The method of claim 12 wherein the at least one encoding scheme transforms a group of unencoded signals to encoded signals such that a difference between a total number of unencoded data values and a total number of encoded data values is a ~~predetermined~~ fraction of the total number of unencoded data values.

Claim 14 (Previously presented): The method of claim 9 further comprising the step of transforming the groups of encoded signals received by the second node back into the plurality of unencoded signals.

Claim 15 (Currently amended): An apparatus for inter-node communication, comprising:

means for dividing a plurality of unencoded signals into groups at a first node, wherein each group ~~has a number~~ includes a portion of the unencoded signals;

means for transforming each group of unencoded signals into a group of encoded signals, wherein each group of encoded signals has nearly an equal number of logic 1's and logic 0's; and

means for transmitting the groups of encoded signals to a second node, whereby the groups of encoded signals are transmitted with minimal current fluctuations.

Claim 16 (Previously presented): The apparatus of claim 15 further comprising means for selecting at least one encoding scheme prior to transforming each group of unencoded signals into a group of encoded signals.

Claim 17 (Currently amended): The apparatus of claim 16 wherein the at least one encoding scheme transforms a group of unencoded signals to encoded signals such that a difference between a total number of unencoded data values and a total number of encoded data values is a ~~predetermined~~ fraction of the total number of unencoded data values.

Claim 18 (Previously presented): The apparatus of claim 16 wherein the means for transforming each group of unencoded signals into a group of encoded signals comprises means for transforming a group of unencoded signals into a group of encoded signals having an equal number of logic 1's and logic 0's using one of the selected at least one encoding scheme.

Claim 19 (Previously presented): The apparatus of claim 17 wherein the means for transforming each group of unencoded signals into a group of encoded signals comprises means for transforming a group of six unencoded signals into a group of eight encoded signals.

Claim 20 (Previously presented): The apparatus of claim 17 wherein the means for transforming each group of unencoded signals into a group of encoded signals comprises means for transforming a group of four unencoded signals into a group of six encoded signals.

Claim 21 (Previously presented): The apparatus of claim 15 further comprising means for transforming the groups of encoded signals received by the second node back into the plurality of unencoded signals.

Claim 22 (Currently amended): An apparatus for inter-node communication, comprising:

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means for dividing a plurality of unencoded signals into groups at a first node, wherein each group ~~has a number~~ includes a portion of the unencoded signals;

means for transforming each group of unencoded signals into a group of encoded signals, wherein each group of encoded signals has nearly a constant number of logic 1's and logic 0's; and

means for transmitting the groups of encoded signals to a second node, whereby the groups of encoded signals are transmitted with minimal current fluctuations.

Claim 23 (Previously presented): The apparatus of claim 22 further comprising means for selecting at least one encoding scheme prior to transforming each group of unencoded signals into a group of encoded signals.

Claim 24 (Currently amended): The apparatus of claim 23 wherein the at least one encoding scheme transforms a group of unencoded signals to encoded signals such that a difference between a total number of unencoded data values and a total number of encoded data values is a ~~predetermined~~ fraction of the total number of unencoded data values.

Claim 25 (Previously presented): The apparatus of claim 23 wherein the means for transforming each group of unencoded signals into a group of encoded signals comprises means for transforming a group of unencoded signals into a group of encoded signals having a constant number of logic 1's and logic 0's using one of the selected at least one encoding scheme.

Claim 26 (Previously presented): The apparatus of claim 22 further comprising means for transforming the groups of encoded signals received by the second node back into the plurality of unencoded signals.

Claim 27 (Currently amended): A computer-useable medium including computer program code for causing a computer to effect inter-node communication by performing the steps of:

dividing a plurality of unencoded signals into groups at a first node, wherein each group ~~has a number~~ includes a portion of the unencoded signals;

transforming each group of unencoded signals into a group of encoded signals, wherein each group of encoded signals has nearly an equal number of logic 1's and logic 0's; and

transmitting the groups of encoded signals to a second node, whereby the groups of encoded signals are transmitted with minimal current fluctuations.

Claim 28 (Previously presented): The computer-useable medium of claim 27 further comprising computer program code for causing a computer to effect inter-node communication by performing the step of selecting at least one encoding scheme prior to transforming each group of unencoded signals into a group of encoded signals.

Claim 29 (Previously presented): The computer-useable medium of claim 28 wherein the step of transforming each group of unencoded signals into a group of encoded signals comprises the step of transforming a group of unencoded signals into a group of encoded signals having an equal number of logic 1's and logic 0's using one of the selected at least one encoding scheme.

Claim 30 (Previously presented): The computer-useable medium of claim 27 further comprising computer program code for causing a computer to effect inter-node communication by performing the step of transforming the groups of encoded signals received by the second node back into the plurality of unencoded signals.

Claim 31 (Currently amended): A computer-useable medium including computer program code for causing a computer to effect inter-node communication by performing the steps of:

dividing a plurality of unencoded signals into groups at a first node, wherein each group ~~has a number~~ includes a portion of the unencoded signals;

transforming each group of unencoded signals into a group of encoded signals, wherein each group of encoded signals has nearly a constant number of logic 1's and logic 0's; and

transmitting the groups of encoded signals to a second node, whereby the groups of encoded signals are transmitted with minimal current fluctuations.

Claim 32 (Previously presented): The computer-useable medium of claim 31 further comprising computer program code for causing a computer to effect inter-node communication by performing the step of selecting at least one encoding scheme prior to transforming each group of unencoded signals into a group of encoded signals.

Claim 33 (Previously presented): The computer-useable medium of claim 32 wherein the step of transforming each group of unencoded signals into a group of encoded signals comprises the step of transforming a group of unencoded signals into a group of encoded signals having a constant number of logic 1's and logic 0's using one of the selected at least one encoding scheme.

Claim 34 (Previously presented): The computer-useable medium of claim 31 further comprising computer program code for causing a computer to effect inter-node communication by performing the step of transforming the groups of encoded signals received by the second node back into the plurality of unencoded signals.